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25 September 1964

MEMORANDUM FOR: Chief, Logistics Branch, Support Staff

ATTENTION :

THROUGH : Chief, Development Branch, P&DS

SUBJECT : Development of a Film-Editing Table

Enclosed are 42 copies of the Development Objectives for a Film-Editing Table. Two copies are for your file and two copies are for forwarding to each of the same twenty concerns that were listed in the memorandum directed to you dated 16 September 1964. The subject of this memorandum was the Development of a Twin Light Source Light Table. Since these two developments are similar in many respects, it is suggested that both objectives be sent to the same firms.

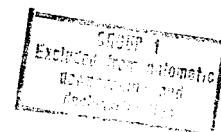
Development Branch, P&DS

NPIC/P&DS/DB: :ee/ (25 Sept. 1964)

Distribution:

- Orig. + 1 - Addressee
- 1 - LB/SS
- 1 - Chrono
- 1 - Project Folder

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DECLASS REVIEW by NIMA/DOD

14 September 1964

DEVELOPMENT OBJECTIVES

Design of a Film-Editing Table

1. Introduction

With the increased use of new materials and film bases, there is a need for a new film editing table. Because the existing equipment uses a ripping bar technique suitable only for thin-base films, a new table must be developed which can cut or slice these new base materials that are too tough to be ripped.

2. Concept

a. Purpose. This development would allow the operator to edit any width of film from 35mm to 9 $\frac{1}{2}$ " -- regardless of the base material. Because of the slicing capability, it is anticipated that this development will satisfy any future editing requirements.

b. Scope. The design will fulfill all existing requirements (in addition to those expected in the future) and will not be material-limited. The design will not utilize an exotic film-joining process but instead will use tape for splicing the film after it is cut.

c. There are certain basic capabilities that must be met in developing an editing table for operational use. This table shall not render the film fully-edited for final processing, but it shall fulfill our other present and projected requirements. Throughout this objective the following usage will apply:

1. Slicing or cutting - the physical action of parting the strip of film.
2. Splicing - the process of joining the cut film together again.
3. Editing - the complete slicing and splicing operation.

3. Requirements.

For a satisfactory development of an operational film-editing table the following list of requirements must be met. It must be emphasized that the listing in no way implies an order-of-importance, but all of the requirements must be met to the same degree of perfection.

- a. The film-editing table must be so constructed as to have the cutting mechanisms centered between two viewing surfaces -- each of which should be at least 11" wide by 15" long. These viewing surfaces should have an intensity of approximately 1200 foot-lamberts and a means of heat dissipation which prevents the film from heat above 120°F. The light should be completely diffused, and its intensity should be variable from 200 to 1200 foot-lamberts.
- b. The cutting mechanism must be capable of cutting all types and thicknesses of photographic film from 1 to 7 mil thickness. The mechanism should be capable of maximum slicing operations before replacement, and replacement should be extremely simple and economical. The life vs cost and ease of replacement of the cutter will be the main criteria in proposal selection.
- c. The cutting mechanism must be arranged so that it slices the film precisely at a 90-degree angle in relation to the edge of the film.
- d. There must be a film hold-down capability to secure the film during cutting and splicing operations.
- e. There must be a tape-dispensing component capable of dispensing standard 2592" masking (or similar) tape. This element should be located as near to the cutting area as possible for minimum operator effort in splicing the cut film.
- f. There should be a roller at each end of the table which will spin so that the film will not be scratched as it traverses the viewing surface. These rollers should have a continuous smooth surface and should be as light as possible to decrease inertial effects when spinning. The rollers should be positioned to allow the film to traverse about 1/8" above the top of the viewing surface.
- g. On any portion of the table that comes in contact with the film there should be no rough edges. In this respect, none of the above mentioned parts should be fabricated from a material that would trap grit or collect dust.
- h. On the extreme outside of the table, there should be film cranks accommodating up to 12"-diameter film spools. The cranks

should be geared to allow the operator to turn the film spools at least four times for each revolution of the crank handle. The spools should be positioned in such a manner to allow the film to pass over the film rollers (mentioned in f.) even when the spools are filled. These film cranks should be held in a stationary position and the opposite spool holder must be adjustable for use with 35mm to $9\frac{1}{2}$ " film widths.

i. The film cranks should be so positioned that they are no more than 48" apart, for wider spacing would contribute to operator fatigue.

j. The table should be constructed to allow the operator to perform his duties while seated at normal chair height.

k. The table should be mounted on casters with locks so that it can be moved or rigidly positioned.

l. The table should be constructed with vertical positioning pins for mating a film transport dolly to the table. One pin should be located directly under the film crank handle with its top surface $10\frac{1}{4}$ " above the floor surface (after the wheels have been locked into position). The second pin should be located 11" center-to-center along the film spool axis, beside the first pin. These pins should be $1\frac{1}{2}$ " tall and threaded 1" from the top with 3/8-24 threads. See figure #1.

m. Each positioning pin should be supplied with a knurled alignment nut as specified in Figure #2.

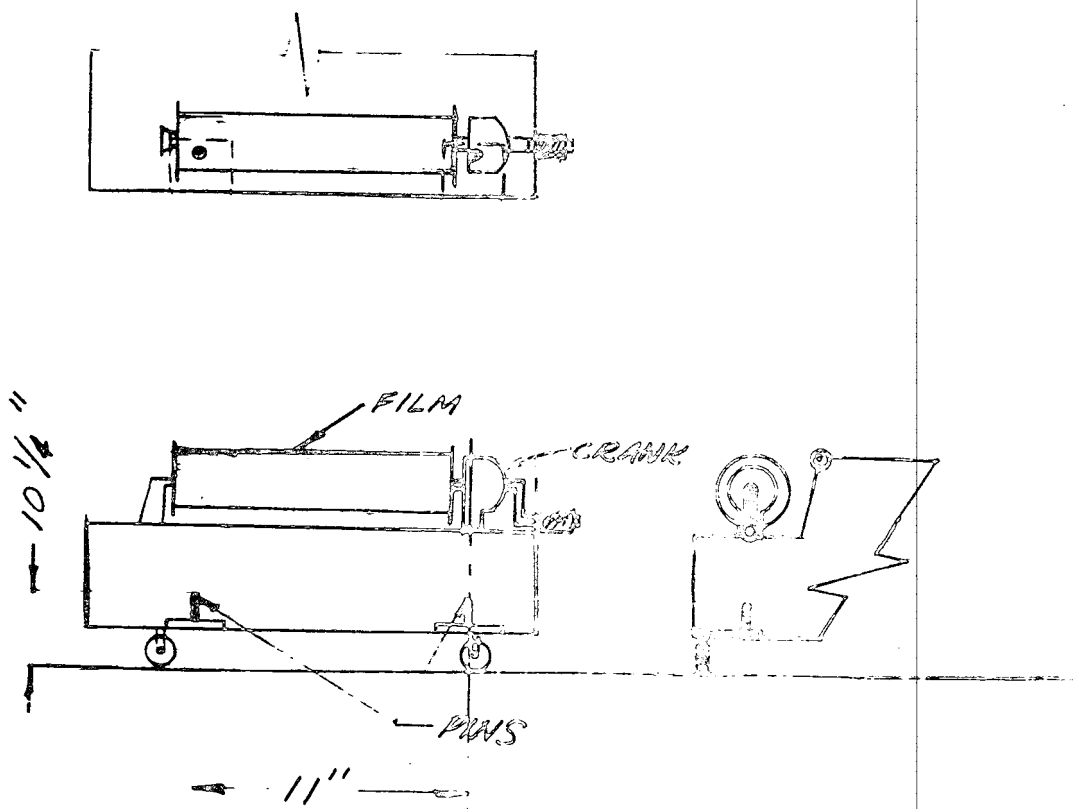
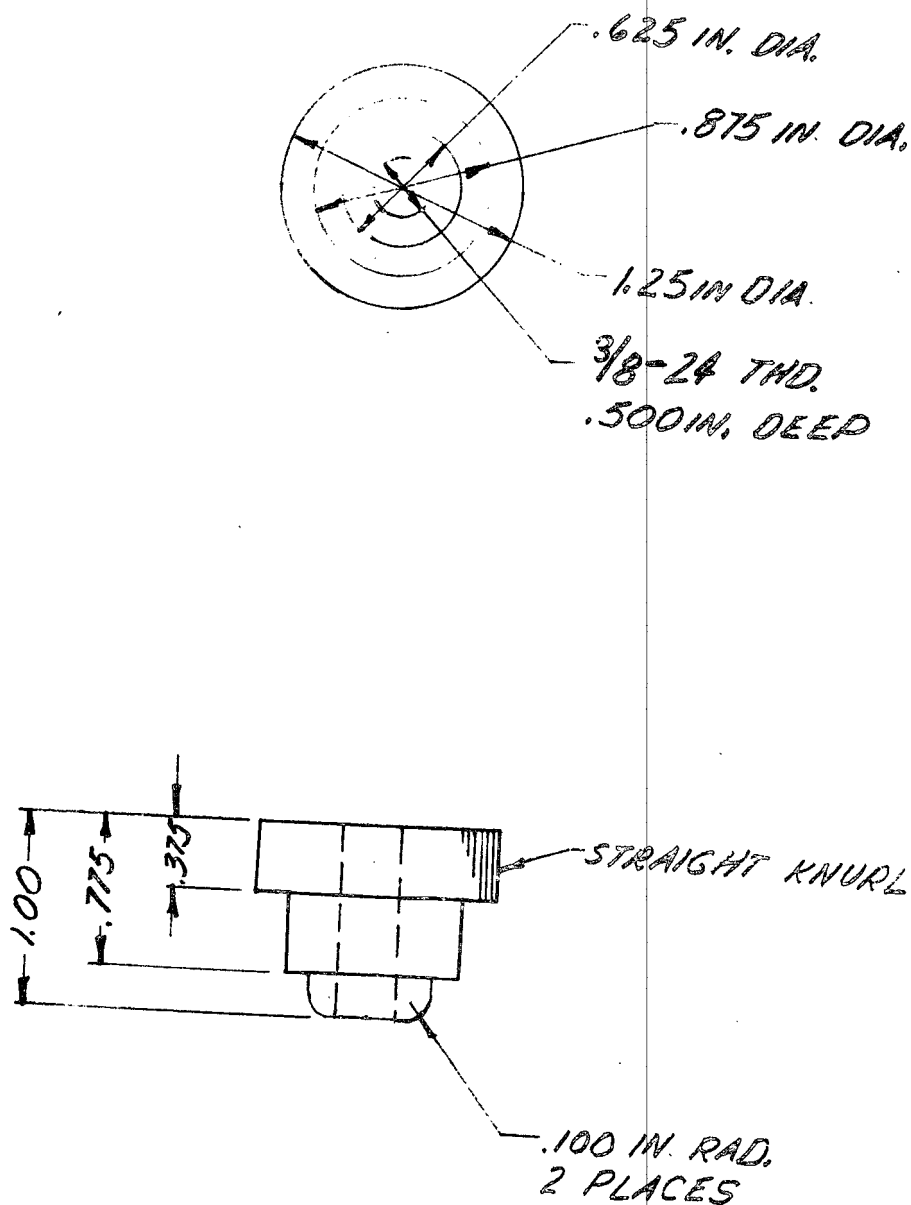


FIGURE #1 TO SHOW PIN ARRANGEMENT.



STAINLESS STEEL

FIGURE NO 2